

The opinion in support of the decision being entered today was not written for publication and is not binding precedent of the Board.

Paper No. 17

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte KWAN-HO CHAN

Appeal No. 1998-2327
Application No. 08/467,619

ON BRIEF

Before GARRIS, JEFFREY T. SMITH, and PAWLIKOWSKI,
Administrative Patent Judges.

GARRIS, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on an appeal which involves claims 1-20. These are all of the claims in the application.

The subject matter on appeal relates to a bone cement preparation system comprising a container having a first chamber and a second chamber. The first chamber contains a first liquid component comprising a liquid alkyl methacrylate, poly(alkyl methacrylate), polymerization initiator and a

stabilizer, wherein the liquid alkyl methacrylate is present in an amount sufficient to provide the first liquid component as a liquid mixture and wherein the first chamber is substantially free of air. The second chamber contains a second liquid component comprising a liquid alkyl methacrylate, an activator and a stabilizer, wherein the liquid alkyl methacrylate is present in the second liquid component in an amount which is sufficient to provide the second liquid component as a liquid mixture and wherein the second chamber is substantially free of air. This appealed subject matter is adequately illustrated by independent claim 1 which reads as follows:

1. A bone cement preparation system for providing a liquid bone cement having a first monomer/polymer ratio, said system comprising a container having a first end and a second end, said container having a first chamber and a second chamber located between said first and second ends, each of said first and second chambers having an outlet in said second end of said container, said container being free of internal communication between said first chamber and said second chamber;

said first chamber containing a first liquid component for said liquid bone cement, said first liquid component comprising a liquid alkyl methacrylate, poly(alkyl methacrylate), a polymerization initiator, and a stabilizer for preventing spontaneous polymerization of the liquid alkyl methacrylate in said first liquid component, the

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liquid alkyl methacrylate being present in said first liquid component in an amount which is at least sufficient to provide the first liquid component as a liquid mixture, said first chamber being at least substantially free of air;

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said second chamber containing a second liquid component for said liquid bone cement, said second liquid component comprising a liquid alkyl methacrylate, an activator, and a stabilizer for preventing spontaneous polymerization of the liquid alkyl methacrylate in said second liquid component, the liquid alkyl methacrylate being present in said second liquid component in an amount which is at least sufficient to provide the second liquid component as a liquid mixture, said second chamber being at least substantially free of air.

The references relied upon by the examiner as evidence of obviousness are:

Yamauchi et al. (Yamauchi) 1980	4,182,035	Jan. 8,
Butler et al. (Butler) 1983	4,383,826	May 17,
Colin et al. (Colin) 1991	5,033,650	Jul. 23,
Chan	5,100,241	Mar. 31, 1992

All of the claims on appeal are rejected under 35 U.S.C. § 103 as being unpatentable over Colin in view of Butler, Yamauchi and Chan.

We refer to the brief and to the answer for a complete discussion of the respective viewpoints advocated by the appellant and by the examiner concerning the above-noted rejection.

OPINION

We have carefully considered the argument and evidence

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advanced on this appeal including the references applied by
the examiner and the Chan Declaration of record offered by the

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appellant. These considerations lead us to conclude that we cannot sustain the § 103 rejection before us.

Viewed in a light most generous to the examiner, the applied references at least arguably teach or would have suggested each of the respective features required by appealed, independent claim 1 which is the broadest claim on appeal. However, we share the appellant's basic viewpoint that these references contain no teaching or suggestion for combining their teachings in such a manner as to achieve the here-claimed invention. Like the appellant, we believe that the only guidance for so combining the applied reference teachings is based upon impermissible hindsight derived from the appellant's own disclosure (W.L. Gore & Assocs. v. Garlock, Inc., 721 F.2d 1540, 1553, 220 USPQ 303, 312-13 (Fed. Cir. 1983), cert. denied, 469 U.S. 851 (1984)) rather than some teaching, suggestion or incentive derived from the prior art (ACS Hosp. Sys., Inc. v. Montefiore Hosp., 732 F.2d 1572, 1577, 221 USPQ 929, 933 (Fed. Cir. 1984)).

More specifically, it is our determination that the applied prior art contains no teaching or suggestion of the

appealed claim 1 features concerning liquid alkyl methacrylate being present in the first liquid component and the second liquid component in amounts sufficient to provide these respective components as liquid mixtures and wherein the first chamber and the second chamber are at least substantially free of air. While the Butler and Yamauchi references may contain teachings or suggestions of alkyl methacrylate and of first and second liquid components for liquid bone cement, these references contain no teaching or suggestion of first and second chambers which are at least substantially free of air. Similarly, while the examiner is correct that Chan discloses forming liquid bone cement in the substantial absence of air, this objective is achieved via the use of an evacuated chamber which contains bone cement powder and into which is injected liquid monomer only when a liquid bone cement is to be prepared and used.

Thus, none of the applied references contains a teaching or suggestion of combining the here-claimed features of first and second liquid components as liquid mixtures and first and second chambers which are at least substantially free of air. Only the appellant's own disclosure teaches combining these

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features so as to solve the bone cement porosity problem caused by air entrapment during the bone cement mixing and transferring process. These circumstances lead us to conclude that the examiner, in making his § 103 rejection, has fallen victim to the insidious effect of hindsight syndrome wherein that which only the inventor has taught is used against its teacher. W.L. Gore & Assocs. v. Garlock, Inc., Id.

For the above-stated reasons, we will not sustain the examiner's § 103 rejection of the appealed claims as being unpatentable over Colin in view of Butler, Yamauchi and Chan.

The decision of the examiner is reversed.

REVERSED

BRADLEY R. GARRIS)	
Administrative Patent Judge)	
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)	BOARD OF PATENT
JEFFREY T. SMITH)	APPEALS AND
Administrative Patent Judge)	INTERFERENCES
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BEVERLY A. PAWLIKOWSKI)	
Administrative Patent Judge)	

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BRG:hh

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